

WHAT IS CLAIMED IS:

1. A multi-band dipole antenna adapted for a wireless communication device, comprising:

an insulative substrate;

a conductive element including a ground portion and a radiating portion symmetrically disposed on the insulative substrate, the ground portion and the radiating portion symmetrically defining an L-shaped first and second slots respectively; and

a feeder including an inner core connecting to the radiating portion and an outer shield connecting to the ground portion.

2. The multi-band dipole antenna as claimed in claim 1, wherein the ground portion comprises a first ground plate and a second ground plate, and the first slot is defined therebetween.

3. The multi-band dipole antenna as claimed in claim 2, wherein the ground portion has a first connecting plate connecting the first ground plate with the second ground plate.

4. The multi-band dipole antenna as claimed in claim 3, wherein the radiating portion comprises a first radiating plate and a second radiating plate, and the second slot is defined therebetween.

5. The multi-band dipole antenna as claimed in claim 4, wherein the radiating portion has a second connecting plate connecting the first radiating plate with the second radiating plate.

6. The multi-band dipole antenna as claimed in claim 5, wherein the inner core of

the feeder electrically connects to the second connecting plate and the outer shield electrically connects to the first connecting plate.

7. A multi-band dipole antenna adapted for a wireless communication device, comprising:

an insulative substrate;

a first dipole unit including a first radiating plate and a first ground plate symmetrically disposed on the insulative substrate;

a second dipole unit including a second radiating plate and a second ground plate symmetrically disposed on the insulative substrate; and

a feeder cable including an inner core connecting to the first and second radiating plates and an outer shield connecting to the first and second ground plates;

wherein the first and second ground plates define an L-shaped first slot therebetween, and the first and second radiating plates define an L-shaped second slot therebetween symmetrical with the first slot.

8. The multi-band dipole antenna as claimed in claim 7, wherein the first and second ground plates are connected by a first connecting plate, the first and second radiating plates are connected by a second connecting plate, and the inner core of the feeder cable electrically connects to the second connecting plate and the outer shield electrically connects to the first connecting plate.

9. A multi-band dipole antenna comprising:

an insulative substrate;

a conductive element formed on one surface of the substrate and including a ground portion and a radiating portion spatially and oppositely arranged with

each other in a mirror image relation along an imaginary center line wherein each of said ground portion and said radiating portion defines a rectangular configuration including long and short sides thereof with a slot starting from a long side toward while not reaching the short side, and a feeder including an inner core and an outer core; wherein the inner core is connected to the radiating portion and the outer core is connected to the ground portion.

10. The antenna as claimed in claim 9, wherein both a joint between the inner core and the radiating portion and another joint between the outer core and the ground portion are located very close to the imaginary center line.
11. The antenna as claimed in claim 9, wherein the slot extends toward said imaginary center line.
12. The antenna as claimed in claim 9, wherein the slot divides the corresponding radiating portion into two sections.
13. The antenna as claimed in claim 9, wherein the slot divides the corresponding ground portion into two sections.